



VETERANS ADMINISTRATION

HOSPITAL
HINES, ILLINOIS

September 3, 1952

YOUR FILE REFERENCE:

IN REPLY REFER TO: 5076-10E5C

Dr. Joshua Lederberg
Department of Genetics
College of Agriculture
University of Wisconsin
Madison 6, Wisconsin

Dear Dr. Lederberg:

Under separate cover, I am mailing you 4-agar slants of cultures of Escherichia coli II. One is the seventh picked colony from the stock culture, a subculture of which (in synthetic medium) was put into synthetic medium containing various concentrations of 2-methyl 1,4-naphthoquinone; that is, it is the parent culture of the small colony variants. The other three are cultures of small colony variants (S.C.V.) obtained by streaking after 48 hours' incubation in 0.00125% quinone. They differ from those described in my paper in that they were obtained by repeated picking of S.C.V. As I have told you, I was not successful this time in recovering S.C.V. in pure culture on direct streaking of any concentration of the quinone, which I lay to the impurity of the quinone. They did appear in comparatively large numbers in 0.00125% quinone, however, and by repeated picking, I obtained these strains which appear to be stable, although they increase somewhat in size on prolonged incubation.

If the S.C.V. are subcultured in Difco nutrient broth, and the broth after 24 hours' incubation is streaked in agar, the typical haze of tiny colonies in pure culture results, which I had previously noted with direct streakings of synthetic medium containing certain concentrations of quinone.

We happen to have no use at present for differential media for the gram negative group so we have nothing on which to test biochemical reactions. We have been extremely busy and have not been able to prepare it.

I trust that these cultures will serve your purpose. I shall be interested to hear.

Very truly yours,

CHARLOTTE A. COLWELL, Ph. D.